Research Activity Report Supported by "Leading Graduate Program in Primatology and Wildlife Science"

(Please be sure to submit this report after the trip that supported by PWS.)

		2015. Nov., 1
Affiliation/Position	Seto Marian biological research center M1	
Name	Akihiro Yoshikawa	

1. Country/location of visit

Japan Yakushima

2. Research project

Species composition and phenology in fern gametophytes

3. Date (departing from/returning to Japan)

2015. Oct. 26 – 2015. Oct. 30 (5days)

4. Main host researcher and affiliation

H. Kudoh, W. Shinohara

5. Progress and results of your research/activity (You can attach extra pages if needed)

Please insert one or more pictures (to be publicly released). Below each picture, please provide a brief description.

The purpose of Yakushima course was to clear the difference of distribution pattern of sporophytes and gametophytes in each site. Sample correcting was conducted in Miyanoura river, Onna river and hanaage river. We choose 3 sites in Miyanoura, 2sites in Onna river and 1site in hanaage river. After correcting, sporophytes were identified based on morphology and save as voucher specimens and the specimen for DNA analysis. Gametophytes samples were saved as only the specimens for DNA analysis because we could not identified gametophytes by only morphology. Gametophytes are going to analysis to identify the species in next genome course in Kyoto.

In this field course, 52 species were identified. Although there were 3 sites in Miyanoura river, 2 sites in Onna river and 1 site in Hanaage river, Hanaage river was most abundant. 21 species were identified around Hanaage river. And, altitude got higher and higher species abundance became lower and lower. Guess from this result, altitude got higher and higher fern may become harder to harder to live. Identifications of gametophytes are going to conduct in genome course using gene bank data.

After go back from Yakushima, we are going to compare the composition of sporophytes and gametophytes, and discuss about distribution pattern of fern in Yakushima. We also have the last spring course data. So, we will discuss about seasonal change of distribution pattern.



Photo. Identifying species and making specimens for DNA analysis

6. Others